AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of upgrading a biomass, comprising:

an upgrading step for performing upgrading treatment of a cellulose based biomass with an oxygen/carbon atomic ratio of at least 0.5, in presence of water, ~~and~~ under a pressure of at least saturated water vapor pressure, and at a temperature of 250 to 350° C for a period of 5 to 120 minutes, and reducing said oxygen/carbon atomic ratio of said biomass from 0.216 to 0.38, and

a separation step for separating an upgraded reactant obtained from said upgrading step into a solid component and a liquid component, and recovering said solid component which is an upgraded biomass with said oxygen/carbon atomic ratio of 0.216 to 0.38 whose recovered weight is at least 40% of the weight of said cellulose based biomass.

2. Cancelled.

3. (Original) A method of upgrading a biomass according to claim 1, wherein said cellulose based biomass is a plant based biomass.

4. (Original) A method of upgrading a biomass according to claim 1, wherein said oxygen/carbon atomic ratio of said biomass after said upgrading treatment is no more than 0.3.

5. (Original) A method of upgrading a biomass according to claim 1, wherein said cellulose based biomass has already undergone shredding, and is upgraded in a water slurry form.

6. (Original) An upgraded biomass, upgraded using a method of upgrading a biomass according to claim 1.

7. (Original) An upgraded biomass according to claim 6, wherein a heating value on combustion is at least 27 MJ/kg.

8. (Original) An upgraded biomass according to claim 6, wherein a volatile component is at least 50%.

9. (Withdrawn) A method of producing a biomass water slurry, comprising:

an upgrading step for performing upgrading treatment of a cellulose based biomass raw material in presence of water and under a pressure of at least saturated water vapor pressure,

a separation step for separating an upgraded reactant obtained from said upgrading step into a solid component and a liquid component,

a crushing step for crushing said solid component obtained from said separation step to an average particle size of no more than 30 μm using a crushing device, and

a mixing step for adding additives, and where necessary water, to said solid component, and mixing, wherein

said crushing step and said mixing step are performed either simultaneously or sequentially in this order.

10. (Withdrawn) A method of producing a biomass water slurry according to claim 9, wherein said cellulose based biomass is a wood based biomass.

11. (Withdrawn) A method of producing a biomass water slurry according to claim 9, wherein an average particle size of a solid component crushed in said crushing step is no more than 20 μm.

12. (Withdrawn) A method of producing a biomass water slurry according to claim 9, wherein said upgrading treatment is conducted at a temperature of 250 to 380°C, for a period of 5 to 120 minutes.

13. (Withdrawn) A method of producing a biomass water slurry according to claim 9, wherein a solid fraction concentration of a biomass water slurry obtained from said mixing step is at least 50 mass%.

14. (Withdrawn) A method of producing a biomass water slurry according to claim 9, wherein a cellulose based biomass raw material used in said upgrading step has already undergone shredding.

15. (Withdrawn) A method of producing a biomass water slurry according to claim 14, wherein said shredded cellulose based biomass raw material is used in said upgrading step in a water slurry form.

16. (Withdrawn) A biomass water slurry comprising, as a solid fraction, at least 50 mass% of an upgraded biomass produced by upgrading a cellulose based biomass in presence of water and under a pressure of at least saturated water vapor pressure, and crushing to an average particle size of no more than 30 μm.

17. (Withdrawn) A biomass water slurry according to claim 16, wherein a solid fraction concentration is from 55 to 75 mass%.

18. (Withdrawn) A biomass water slurry according to claim 16, wherein an average particle size of a solid component is no more than 20 μm.

19. (Currently amended) A method of producing an upgraded biomass gas, comprising:

performing upgraded treatment of cellulose based biomass with an oxygen/carbon atomic ratio of at least 0.5, in presence of water, ~~and~~ under a pressure of at least that of saturated water vapor pressure, and at a temperature of 250 to 350° C for a period of 5 to 120 minutes, and reducing said oxygen/carbon atomic ratio of said biomass from 0.216 to 0.38,

separating an upgraded reactant obtained by said upgraded treatment into a solid component and a liquid component, and recovering said solid component which is an upgraded biomass with said oxygen/carbon atomic ratio of 0.216 to 0.38 whose recovered weight is at least 40% of the weight of said cellulose based biomass, and

subjecting said recovering solid component to gasification treatment at a gasification temperature within a range from 800 to 1300°C and a gasification pressure of 0.1 to 10 MPa, in presence of a gasifying agent comprising from 25 to 40% of a quantity of oxygen required for complete combustion, and a required quantity of steam.

20. Cancelled.